

CATALINA 375 CONSTRUCTION DETAILS

Tried and True Methods Endure at Catalina Plant

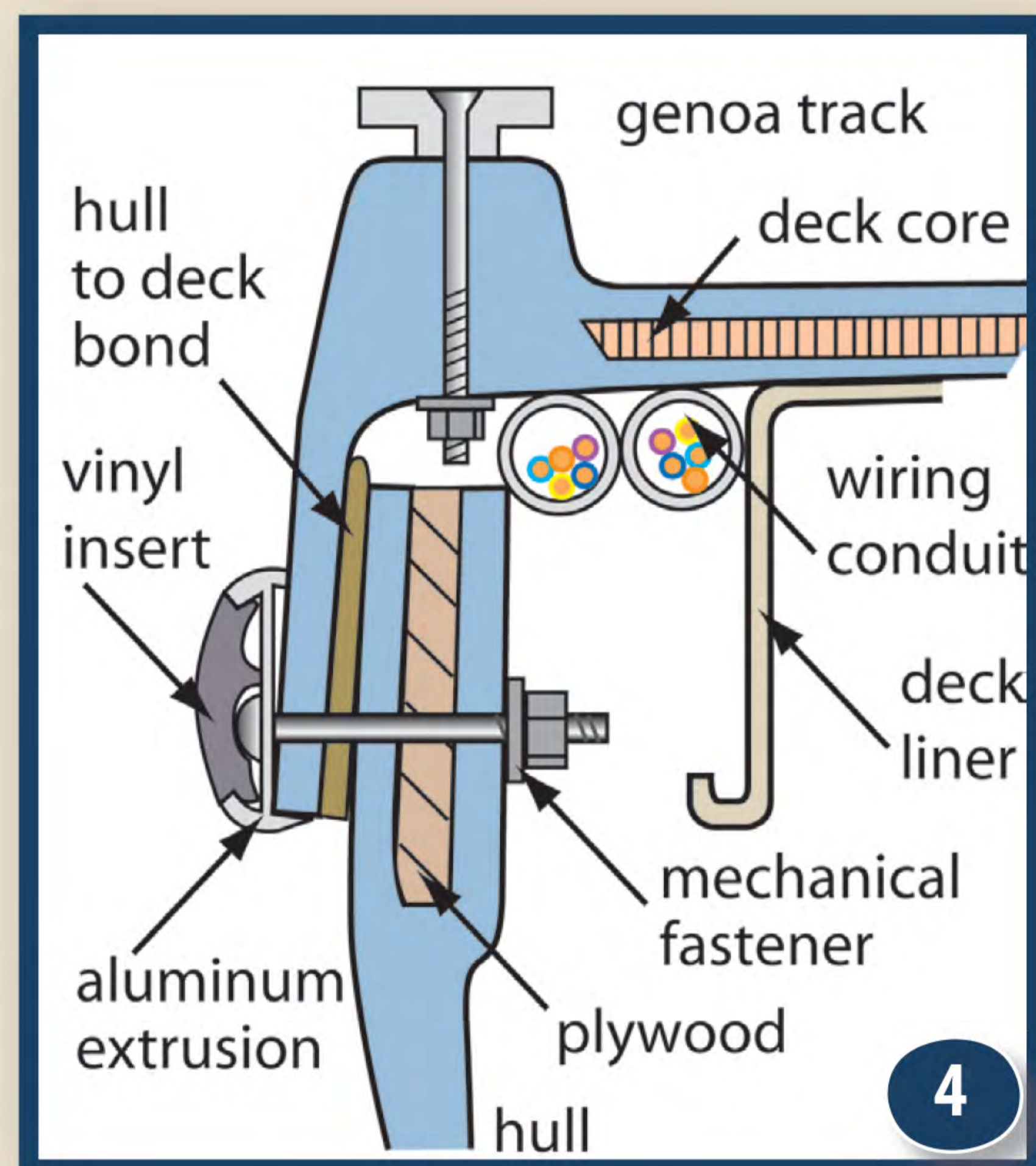
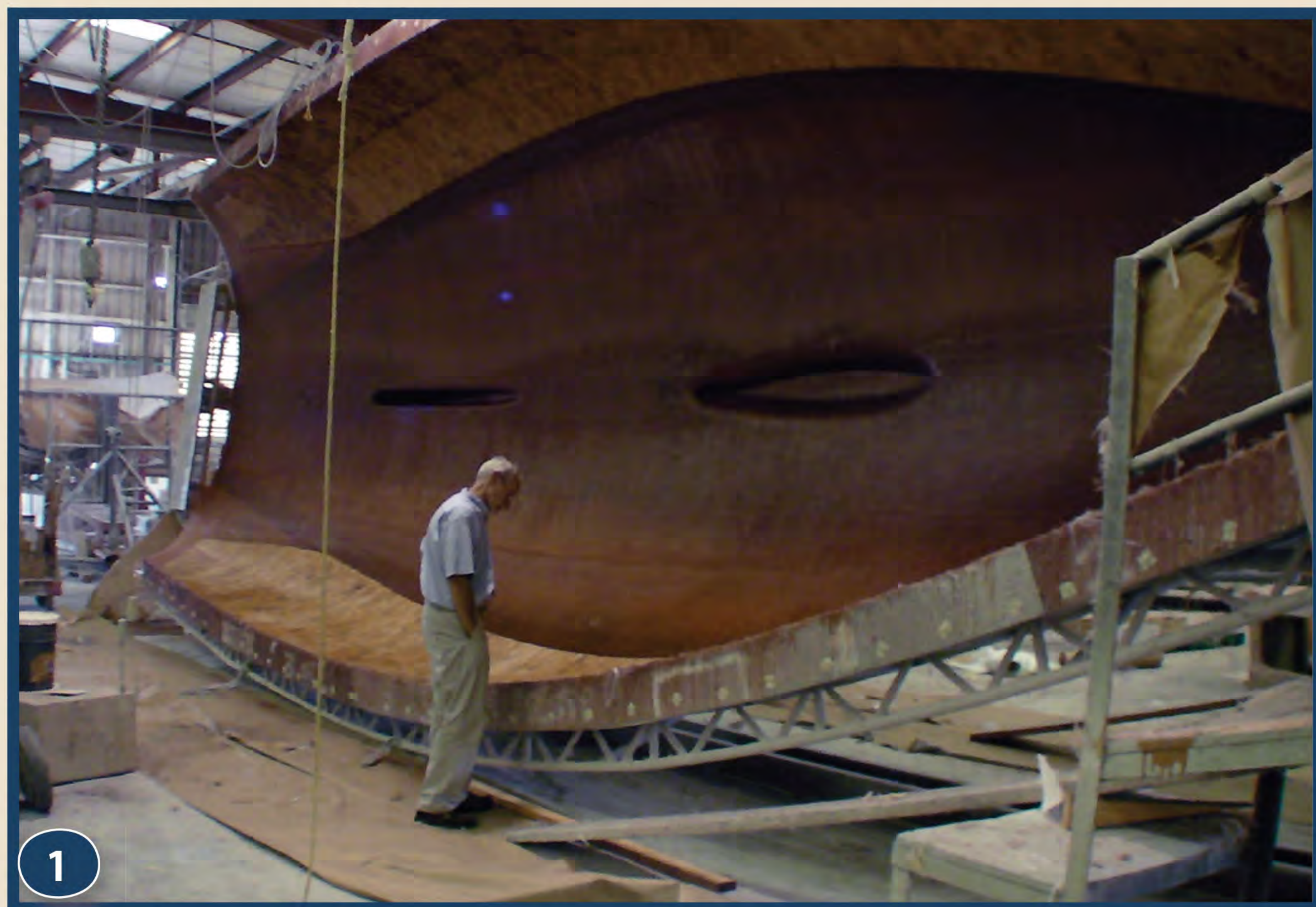
The Catalina 375 is assembled using four principle molds: the hull (with a separately molded structural grid), the deck, the transom, and the interior liner, which incorporates the cabin sole and some of the furniture. There is also an overhead liner, which helps conceal wiring conduits and provides a layer of insulating air between the deck and cabin.

Hull: The hand-laid hull is solid fiberglass. Blister-resistant vinylester resin is used on the outer plies. The laminate schedule alternates cloth, heavy knitted and woven-roven fabrics, and chopped strand mat. Loads from the keel and rig are transferred via a separately laminated structural grid. Molded with biaxial, unidirectional, and non-woven fiberglass for strength, the grid is bonded along the hull bottom. The separately molded transom is glassed to the hull before the deck is capped. The interior liner has a full-length molded-in aluminum stringer near the waterline to provide rigidity.

Deck: The hand laid deck is cored with end-grain balsa. Solid laminate is used at high load areas, or where hatches or ports penetrate the hull, and aluminum plates are laminated into the hull at places where bolt-on hardware will be mounted. Bolts are well sealed with anti-seize coatings, but should leaks develop, this arrangement (used by several other builders) can lead to hidden corrosion problems.

Hull-to-deck joint: The 375 is the largest Catalina with an overlapping “shoebox” flange at this joint. PS prefers a more rugged inward-turning flange joint in boats of this size. 3M 5200 adhesive sealant and 1/4-inch screws secure the deck.

Keel and rudder: While both Beneteau and Hunter use iron keels in their comparable models, Catalina has stuck with the more costly, but far less troublesome, lead keel with stainless-steel bolts. Its rudder is reinforced by a weld-



Practical Sailor's recent visit to the Catalina plant in Largo, Fla., presented insight into its boatbuilding techniques and materials. **1.** While the 375's hull is solid glass, Catalina's larger boats (top) have balsa core above the waterline. **2.** Catalina's ball-and-socket chainplate combats deck leaks. **3.** Catalina molds a separate transom for its larger boats. **4.** The 375 is the largest Catalina boat to use the overlapping hull-to-deck joint. (The 375's genoa track is inboard, not as it is shown here.) **5.** Furniture corners are solid teak to withstand knocks.

ed stainless steel structure that is welded to the rudder post and bonded to the rudder skin with heavy glass laminate.

Rig: The 375 has a continuous two-spreader rig that allows easy adjustment

from the deck. To reduce the chance of deck leaks where rigging loads pass through the deck, Catalina uses a ball and socket tie-rod that reduces any shear loads at the adhesive sealant's bondlines.